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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/533,922	05/03/2005	Andrea Giraldo	NL 021125	6085
24737 7590 07/17/2007 PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001 BRIARCLIFF MANOR, NY 10510			EXAMINER ABDIN, SHAHEDA A	
			ART UNIT 2629	PAPER NUMBER
			MAIL DATE 07/17/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/533,922	Applicant(s) GIRALDO ET AL.	
	Examiner Shaheda A. Abdin	Art Unit 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 May 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

2. Fig. 4 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Abstract

4. This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required.

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Claim Objections

5. Claims 1-16 are objected to because of the following informalities: The use of parentheses in claims 1, 3-5, 12-16 are improper because the parentheses uses only for the reference characters (see MPEP 608.01(M)). Appropriate correction is required.

6. Claims 3 and 15 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim should refer to other claims in the alternative only.
7. Claims 4-11 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claims 4-11. See MPEP § 608.01(n). Accordingly, the claim 4-11 not been further treated on the merits.
8. The spelling "performed" in claim 2 should be corrected to "performed".

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claim 16 is rejected under 35 U.S.C. 102(b) as being anticipated by Knapp et al. (US. Patent No: 6373454 B1).

Regarding claim 16:

Knapp (Fig. 3) discloses a pixel cell (10) in an active matrix display device, comprising a data line (14), a drive element (30), an emissive element (20), and a first switch (37) provided between the data line (14) and the drive element (30), characterized by a second switch (33) provided between the data line (14) and the first electrode (cathode) of the emissive element (20) (column 7, lines 26-55, fig. 3).

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claim 1-3, 12-15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Knapp in view of Kimura et al. (US Pub. No: 2004/0085270 A1).

(1) Regarding claims 12:

Knapp discloses a an active matrix display device comprising a plurality of fixed cells(10) each having a current driver emissive element (20) and means for connecting a data line (14) to the first electrode (cathode) of the emissive element; further characterizing by:

Means (31) for providing a sensing voltage (positive voltage) which is negative in respect of an emissive element cathode voltage, thereby reverse bias the emission element (see column 8)),

Means (30,32,38) for detecting any leakage current flowing through emissive element (i.e. current I_{in} differs from the drive current for the display element caused by the switch and capacitance. Thus it is necessary to sample or detect the leakage current) (see column 8, lines 35-46).

Knapp teaches a data line and emissive element but does not teach sensing voltage provided on the data line.

However, Kimura in the same field of endeavor discloses a sensing voltage (e.g. Vdd or Vss) provided on the data line ([0145-0152], Fig. 19A and 19B).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of invention to incorporate a method of sensing voltage as taught by Kimura into the data line of Knapp so a sensing voltage can be provided on the data line to the reverse bias of emissive element. In this configuration the system would have high quality image which will be capable of suppressing the luminance variations and achieving a consistent luminance (Kimura,[0008]).

(2) Regarding claim 1:

This claim differs from claim 12 only in that the limitations "repeated output periods" is additionally recited. This limitation is taught by Knapp as the addressing periods (see column 6, lines 44-59 and column 8, lines 44-53)

(3) Regarding claim 2:

Knapp teaches sensing periods being preformed recurrently (repeatedly) separated by a predefined number of output period (column 8, lines 44-53).

(4) Regarding claim 3:

Kimura teaches pixel cell comprises two switches (12,13) for connecting said data line to the drive element and/or the anode of the emissive element said method further comprising:

controlling said switches so that, during said sensing period the data line (14) is connected only to said first electrode (electrode of LED) (see Fig. 19C).

(5) Regarding claim 13:

Knapp teaches each pixel cell (10) comprises two switches (30 and 37) arranged in series between the data line (14) and the drive element (20), the emissive element first electrode (first electrode for LED 20) being connected to a point (e.g. 36) between said switches (column 8, lines 30-52, and Fig. 4).

(6) Regarding claim 14:

Knapp teaches each pixel cell (10) comprises a first switch (37) provided between the data line (14) and the drive element (30), and a second switch (33) provided between the data line (14) and the first electrode (first electrode in LED 20) of the emissive element (20) (column 8, lines 30-52, and Fig. 4).

(7) Regarding claim 15:

Knapp teaches the emissive element (20) is an organic or polymer light emitting diode (column 5, lines 38-55).

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kimura (US Pub. 2004/0085270 A1) discloses a signal line driving circuit and light emitting devices.

Yamazaki (US 6842160 B2) discloses display apparatus and display method for minimizing decreases in luminance.

Inquiry

14. Any inquiry concerning this communication should be directed to the examiner at (571) 270-1673 Monday- Friday 7:30 AM to 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chanh Nguyen, can be reached at (571) 272-7772.

Information regarding the status on an application may be obtained from the Patent Application information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>.

Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9799 (IN USA OR CANADA) or 571-272-1000.

Any response to this action should be mailed to:

Commissioner of patents and trademarks

Washington, D.C. 20231

Or fax to:

(703)872-9314 (for Technology Center 2600 only)

Shaheda Abdin

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